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Significant speeches, current research activities, and minutes of business meetings are reported for the conference attended by 74 participants and guests from 12 states and the U.S. Office of Education. Major presentations were: (1) "Whither Vocational and Technical Education, (2) "Department Position Paper on Vocational Education," (3) "Evaluative Criteria in Agricultural Education," (4) "Evaluation in Ornamental Horticulture," (5) "Instructional Areas in Agricultural Education," (6) "Reporting Agricultural Programs," (7) "Sociological Implications of Professionalism, Unionism, and Bureaucracy as Occupational Environments," (8) " A National Study of Employment Opportunities and Training Needs in Farming and Off-Farm Agricultural Business and Industry," (9) "Abstracts of Studies in Agricultural Education, 1966-67," (10) "Agricultural Education Research in 1966," (11) "Automatic Controls in Agriculture," (12) "A Plan to Meet the Vocational Education Needs of Citizens of a Low Income Community Applachia," (13) "Educational Innovations Among Experienced Teachers of Agriculture in North Carolina," (14) "Development and Evaluation of Occupational Information in Agriculture," and (15) "The System of Agricultural Education in Yugoslavia and Its Effect on Agricultural Manpower Development." Summaries of three symposia are also included. (DM)

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PROCEEDINGS

Regional
Seminar and Research Conference
in
Agricultural Education
1967

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Agricultural Education Division
Department of Education
New York State College of Agriculture
A Statutory College of the State University
Cornell University
Ithaca, New York 14850

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MAY 6 1968

REGIONAL SEMINAR AND RESEARCH CONFERENCE IN AGRICULTURAL EDUCATION

Teacher Educators, Supervisors, Program Consultants, Guests, and Graduate Students of Vocational Education in Agriculture from:

Connecticut
Delaware
Illinois
Maryland
Massachusetts
New Hampshire
New Jersey
New York
Pennsylvania
Rhode Island
U. S. Office of Education
Vermont
West Virginia

New York State College of Agriculture
Cornell University
Ithaca, New York 14850

November 8, 9 & 10, 1967

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PREFACE

This publication reports significant speeches, current research, activities, and minutes of business meetings held during the 1967 Regional Seminar and Research Conference in Agricultural Education.

The conference proceedings are organized chronologically in five sections, each reporting one of the five general sessions conducted during the three-day conference. No summary is included where copies of a paper presented were distributed at the conference. Requests for copies should be directed to the person who presented the paper.

The Research Reporting Session Minutes in Section 4 include only the research title and name of the person presenting the research. It is felt that detailed information can best be obtained directly from the persons conducting the research.

The minutes of the AATEA and NASAE business meetings are included at the end of Section 5.

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TABLE OF CONTENTS

Page

PREFACE.. iii

CONFERENCE PARTICIPANTS.............................. iv

FIRST GENERAL SESSION................................ 1

Welcome to Cornell - Herbert Everett...................... 1
Conference Preview and Introduction of Conference Planning Group - Joe P. Bail.......................... 1
"Whither Vocational and Technical Education" - Keynote Address by Mauritz Johnson.......................... 1
"Department Position Paper on Vocational Education" - Everett Lattimer.......................... 5

SECOND GENERAL SESSION............................... 5

"Evaluative Criteria in Agricultural Education" - William E. Drake.......................... 6
"Evaluation in Ornamental Horticulture" - William H. Annis... 10
"Instructional Areas in Agricultural Education" - Glenn Stevens.......................... 11
"Reporting Agricultural Programs" - Joe P. Bail........... 11
Questioning Panel to Afternoon Speakers................... 12

THIRD GENERAL SESSION................................ 13

"Sociological Implications of Professionalism, Unionism and Bureaucracy as Occupational Environments" - Keynote Address by Lee Taylor.......................... 13
"A National Study of Employment Opportunities and Training Needs in Farming and Off-Farm Agricultural Business and Industry" - Philip Teske.......................... 14
"Abstracts of Studies in Agricultural Education, 1966-67" - David Shontz.......................... 20
"Agricultural Education Research in 1966" - Glenn Stevens.... 20
Questioning Panel.. 21

FOURTH GENERAL SESSION............................... 21

Symposium - Curricula for Post-High School Technical Programs in Agriculture.......................... 21
  "Agricultural Engineering Technology" - Edward B. Mott. 21
  "Animal Science Technology" - Herman Brant............ 27
  "Fishery Technology" - David Shontz................... 27
  "Food Handling Technology" - Richard Lalley............ 28
  "Forestry Technology" - David Larrabee................ 28

FOURTH GENERAL SESSION (Cont'd)

Page

"A Progress Report on Planning, Organizing and Development of Curriculum Materials in Agricultural Education" - Charles Wiggins.......... 28
"Computer Assisted Instruction" - Joseph Impellitteri.......... 32
"Needed Research in Agricultural Education" - Philip Teske... 33
Research Reporting Session.......... 3[illegible]
  "Automatic Controls in Agriculture" - Robert T. Benson... 33
  "A Plan to Meet the Vocational Education Needs of Citizens of A Low Income Community Appalachia" - Charles Rhodes.......... 33
  "Educational Innovations Among Experienced Teachers of Agriculture in North Carolina" - Willie T. Ellis.......... 33
  "Development and Evaluation of Occupational Information in Agriculture" - Norman K. Hoover.......... 34
  "The System of Agricultural Education in Yugoslavia and Its Effect on Agriculture Manpower Development" - Theodore Buila.......... 34

FIFTH GENERAL SESSION.......... 34

Symposium - What's New in Teacher Education?.......... 34
  "Don't Discourage Prospective Agriculture Teachers" - Ralph P. Barwick.......... 34
  "What's New in Teacher Education in Agriculture?" - Charles C. Drawbaugh.......... 34
  "What's New in Pennsylvania?" - David McClay.......... 35
  "What's New in West Virginia?" - R. C. Butler.......... 35
  "Teacher Education at New Hampshire" - William Annis.... 37
  "In-Service Training" - Lyle Wicks.......... 37
Symposium - What's New in Supervision?.......... 40
  "What's New in Rhode Island?" - Ray Northup.......... 40
  "What's New in Massachusetts?" - Philip A. Haight.......... 41
  "What's New in New York?" - Harold L. Noakes.......... 41
  "What's New in Supervision?" - Raymon Cunningham.......... 42
  "What's New in New Hampshire?" - Martin L. Mitchell..... 43
Summary - L. L. Turner.......... 44
Business Session, Agricultural Education Division of AVA...... 44
  Report of AATEA Regional Vice-President - Ralph Barwick.. 44
  Report of NASAE Regional Vice-President - W. H. Wayman.. 45
  Report of NVATA Regional Alternate Vice-President - Howard Teal.......... 46
  Report of Regional Members on Standing Committees.......... 47
    Professional Relations - William E. Drake.......... 47
    Council on Teacher Education - William E. Drake.......... 49
    Professional Information - Frank Wolff.......... 52
    Standards and Policies - L. L. Turner.......... 53
    Teacher Education - Warren Kelly.......... 53

FIFTH GENERAL SESSION (Cont'd)

Page

Membership - David McClay........................ 55
Agricultural Education Magazine - David McClay....... 56
Professional Personnel Recruitment - Charles Drawbaught.................................. 56
Publications - Joe P. Bail............................ 57

Election of Vacancies to Standing Committees................ 57

Dates and Location for Conference in 1968 and 1969.......... 57

CONFERENCE PROCEEDINGS

First General Session - November 8, 1967

Chairman: Harold L. Noakes   Secretary: Garry Bice

The Regional Seminar and Research Conference was called to order at 10:00 by Dr. Harold L. Noakes.

Dr. Herbert Everett, Director, Resident Instruction, College of Agriculture, Cornell University, welcomed the group to Cornell.

Dr. Joe P. Bail gave a conference preview and introduced the members of the Planning Group for the Conference.

WHITHER VOCATIONAL AND TECHNICAL EDUCATION

Mauritz Johnson, Head, Department of Education

To answer the question implied by the topic that has been assigned me, one would need a clairvoyance with respect to the future that neither I nor anyone else, so far as I know, would claim to possess. We can speculate, of course, but even to do this, we must decide which of several possible interpretations of the topic we have in mind. When we ask, Whither vocational education?, we could mean, Is it on the ascendency or the descendency? Will it survive, and if so, will it grow or decline in importance, will it assume larger or smaller proportions?

Or we could mean, What will vocational education be *like* in the future?, that is, through what institutions and at what ages will it be offered?, Will its goals be different?, Will it be organized differently?, What methods of instruction will be used, and what kinds of media and materials?

Then, again, the intent of the question may be not one of prediction at all, but of advocacy. Instead of *will* it thrive, *will* it change, what *will* it be like, perhaps we want to ask whether vocational education *should* flourish and what form it *should* take.

If we agree that we are concerned with what *ought* to be, we immediately become aware that we are dealing with value judgements, and whatever I may say, you can react by saying, "That's just your opinion--everyone is entitled to his opinion," and, of course, you'd be right. You might add that "one man's opinion is as good as another's," but I hope you wouldn't because then you'd be wrong. All opinions are not equally good. There are undoubtedly a good many people whose opinions on the future of vocational education are better than mine. Some, but not all, of these people are vocational educators. (I might note in passing that even if I chose to *predict* the future of vocational education instead of passing value judgements on it, you would still be listening to one man's opinion. Only if I presented a historical summary or a description of the current situation would you be able to check the truth of my statements and contradict me.)

The safest and perhaps most productive approach, therefore, would seem to be to make some assertions on which general agreement is likely and then ask some questions relative to the future. The first step in knowing the right answers is to know the right questions.

The first question of all might be, "What do we mean by vocational education?" Do we distinguish between vocational education and vocational training? I find the distinction between education and training a useful one, for I believe that curriculum development proceeds quite differently in the two contexts. Training to me implies a situation in which one has a fairly clear idea of the specific circumstances in which what is learned is to be used. Education, on the other hand, suggests learnings that could find use in any number of circumstances, impossible to predict in advance. The ultimate use of what is learned through training is application in the solution of certain kinds of problems; the principal way in which what is learned through education is used is in the interpretation of subsequent experiences in their infinite variety. Thus, vocational education begins early in the child's life; vocational training comes much later. It is possible to argue that all of general education is vocational education since it is as likely to have relevance to vocational experiences as to any others. But even without taking that extreme position, one can identify many aspects of economics, history, psychology, and sociology which bear upon the place of work in society and the attitudes and habits expected of employees. Perhaps it is in recognition of this aspect of general education that the term "occupational education" has come into common use.

There is no question but that children need to understand the occupational structure of our present society, the changes taking place in it, the opportunities that will be available to them, the expectations that will be made of them, and the kinds of decisions they will be required to make with respect to careers. But, at the same time, must we not be careful that children do not view their general education solely in terms of its vocational relevance? There are certain basic skills and types of knowledge which clearly have potential vocational significance, but would it not be unfortunate if children got the idea that aspects of a liberal education for which such significance was not evident were therefore of little use or importance?

Not very long ago we went through a period when efforts were made to transform all of general education into a program of "training for life," applying the legitimate procedures of vocational training to other non-vocational aspects of adult life. It was apparently assumed that one could specify the behaviors appropriate to good citizenship, family life, and indeed all of "personal living," as well as the circumstances in which these behaviors will take place. The sum total of these forms of training was supposed to be an "education." Unrelated bits and pieces of various disciplines were incorporated as they bore upon "real life" problems, without regard to disciplinary structure. There was little, if any, concern for intellectual development, either for its own sake as a basic element of human fulfillment or for its value as a basis for effective vocational training and re-training.

It is now as near in the future to the Twenty-first Century as it is in the past to the depth of the Great Depression. Incredible changes have come about since Franklin Roosevelt's first term and in all probability even more spectacular ones will occur during the remainder of the century. The most obvious changes have been in the technology of such fields as medicine, communication, power, transportation, agriculture, and manufacturing, based on less widely known advances in biology, chemistry, mathematics, and physics. Education seems to be one of the areas that has been affected least, except in the size of the enterprise.

Can anyone doubt that in the future even larger proportions of the population will seek even more education than is the case today? Ralph Tyler has recently noted that "our society can find constructive places for no more than 5 to 10 per cent of its people who are unskilled and untutored." Will intellectual development become less or more important to the society and the well-being of its people in the future? Will the task of citizens in governing themselves become simpler or more complex? Is education more or less likely to continue throughout life rather than terminating in youth?

Are people likely to have more or fewer leisure hours? What will a nation composed almost exclusively of urban dwellers do with its leisure time? Has anyone ever seen a person with genuine intellectual and esthetic interests who did not know what to do in his leisure, indeed, who ever had enough leisure to do all the things he wanted to do?

What about vocational and technical training -- will more or less be needed? Will there be a need for simpler or more complex training? Will the training call for more or less prior education? Will the necessity for re-training diminish or increase? Which facilitates later re-training more, having had early specific training of another sort, or having had a more extensive general education? Should vocational training be introduced earlier than it is now, or should it be delayed? Should the secondary schools of the future undertake to provide everyone with a salable skill, or should they merely equip students to learn one? Will fewer post-secondary opportunities for vocational training be required, or a greater variety than we have now? Will vocational and technical training call for more or less expensive facilities and equipment? Will it be more sensible to provide such facilities in comprehensive high schools in every community, or in fewer specialized centers?

I personally am of the opinion that vocational education is going to become more important and more technical than ever before. There are a number of encouraging developments: the area vocational schools, the increasing number of terminal programs of two-year community colleges and agricultural and technical colleges, and New York State's new agriculture curriculum with its four specializations in non-farm occupational areas in addition to production agriculture.

I am concerned that with our increasing material affluence we will not take advantage of the opportunity this provides us to enrich the personal lives of all of the people. There was a time when, except for a privileged few, people had to devote almost all their waking hours merely to earning a living. Now virtually every person has the opportunity to add dignity to his life. We are rightly concerned because we still have degrading poverty in the midst of our general affluence. Education and training can contribute to the elimination of this problem, but they probably cannot do much without some basic alteration in our economic system. Culturally and economically deprived individuals can, however, be helped to better their lot, but not through training for early entry into dead-end jobs. The only way by which disadvantaged youth can enter the mainstream of society is to acquire the necessary characteristics, which only a general-liberal education can provide. They may be more readily attracted to, and motivated by, more practical programs, but is it really in their best interests to be diverted too soon from the more abstract studies which are essential to any kind of career advancement, to say nothing of social acceptance and personal happiness? Is not the great challenge to education that of finding a way to organize and present academic subject matter so that it has both appeal and meaning for all pupils?

This is a problem that has not been given anywhere near the attention it deserves and the effort it demands. In part this has been because many educators are convinced either that there are children who by nature are not interested in academic studies and never will be, or that these studies are of little importance, except for those who go on for further formal education. It can, of course, be argued that they are even more important to those who do not go on. But be that as it may, might it be that the necessity for more extensive, more advanced, more complex vocational training in the future will force those responsible for curriculum and instruction in general education to come to grips with the problem of making it possible for more children to acquire the significant aspects of the various disciplines and at an earlier age than in the past? Might vocational educators who encourage any and all moves in that direction find that they have thereby greatly strengthened their own field at the same time?

Is structure any less important in vocational education than in disciplinary studies? Are there some key concepts and related principles on which judgements are made in large clusters of occupations? Should vocational educators see to it that these are incorporated into general education for everyone? Or should these kinds of learnings with broad vocational applicability be emphasized in an intermediate program articulating between general education and specific vocational training? Should vocational and general educators be working together in identifying these key learnings, working out appropriate structural frameworks, and developing instructional packages or program elements, or are the problems sufficiently different that the two groups must work separately? It would seem that general education could profit greatly from the techniques of individualized instruction that have been developed in vocational training. As we look to the future of vocational and technical education, is it unrealistic to hope that research and development in those fields will proceed on the assumption that they are not substitutes for general education, nor subservient to it, nor unrelated after thoughts, but rather parts of a larger educational, societal, and developmental picture, each with much to contribut to, and gain from, the other through coordinated and collaborative efforts?

The answer to, Whither vocational and technical education?, is not pre-ordained. The answer will be what we make it be.

* * *

DEPARTMENT POSITION PAPER

Everett Lattimer, Director
Division of Occupational Education Supervision

Copies of the Position paper were distributed at the conference.

The major sections of the paper are:

Introduction
Impact of Federal Legislation
Some Basic Assumptions on Occupational Education
Characteristics of A Good Program
Where Should Training Be Given
Early and Continuing Guidance
Cooperation with Other Agencies, Individuals
Research
Work-Study Programs
Proposed Goals for Occupational Education

Second General Session - November 8, 1967

Chairman: David McClay   Secretary: Fred Myer

Theme: EVALUATION IN AGRICULTURAL EDUCATION

The conference was reconvened at 1:30 p.m. by Chairman David McClay.

EVALUATIVE CRITERIA IN AGRICULTURAL EDUCATION

William E. Drake, Associate Professor,
Agricultural Education, Cornell

Our Setting for Evaluating

Evaluation, formal or informal, is always taking place when educational programs are operating. And because almost everyone has been a victim of some kind of public education, almost everyone considers himself to be an authority "by license of experience"; and consequently equipped to evaluate. The result is that nearly everybody is evaluating education nearly all the time. And this is not all bad in our system where the public is charged with the financial responsibility for educating the public.

However, we are at a time in occupational education when a more systematic approach to evaluating is timely, in fact, quite essential. Occupational education in agriculture has experienced changes since 1963 that are very significant, in some cases almost revolutionary, and some would say "long over-due." The evaluation of these programs has "here and now" importance for at least two reasons. First, new programs have not been put to the "test of time." Many are young enough to be changeable. They are still in the "growth stage" and careful, systematic evaluation provides the best assurance that they will grow healthy and strong and still be versatile enough to serve an ever-changing agricultural industry. Secondly, these programs are subject to both federal and local funding. They must stand the scrutiny of those who "pay the way." Such programs must demonstrate a degree of economic and social impact that will, in some situations, stand the test of the "political arena." This, at least in part, is the setting in which we face the task of evaluation.

Approaches to the Evaluation of Educational Programs

Two approaches to evaluating educational programs seem to be most common. The first is often referred to as the "result or outcomes approach." This approach normally involves a degree of measurement and is concerned mainly with program "outcomes." The objectives or purposes of the program are identified and stated in measurable components. The measures to be used are established and data which will establish the current status with regard to each measure are gathered. The present status of the program can then be compared to the status of the program at some previous time or to other programs which have like objectives and similar measurable components. This approach has the quality of dealing with real measurements and provides a basis for comparison. However, it may lack the quality of relating "cause to effect" and therefore may not reveal the real causes of a program's success or lack of success in attaining its objectives.

The second commonly used approach to program evaluation may be referred to as "Method Centered." In this approach, "Guiding Principles" are usually established. These principles reflect the general purposes and goals of the program being evaluated. The generally accepted procedures of organization, teaching and administering such programs are established. In addition, the facilities considered optimum and generally accepted program outcomes are established. These generally accepted ways of conducting a program then become the criteria by which a specific program is evaluated. The data for evaluating becomes the degree to which the usually accepted standards are met. This method has the quality of revealing how well a particular program is being conducted in terms of those methods and practices which are considered essential to a quality program. This approach must assume that the established methods and procedures are valid and that the specific program under evaluation should have such methods and procedures applied to it. The approach does not necessarily consider that there might be a "better way" and usually is rather void of measurements reflecting outcomes of the program being evaluated.

Certainly both approaches have a place in evaluation of occupational education programs. However, some combination of both approaches would seem to be the most realistic attack to the evaluation problem.

Objectives are Important

Evaluation usually starts with a careful identification of the objectives of that program which is being evaluated. Criteria must be established, upon which the evaluation can take place. If these criteria are to be valid and reliable they must reflect objectives that are realistic and sound for the particular program being evaluated. It follows "that unless we know what it is we are attempting to do...it is doubtful whether we know how to set about doing it or how well we are doing at any specific time." Because objectives are the evaluation "starting point" and vital to the whole process, they must be clearly identified and quite specific. As we deal with the problem of evaluating programs at a national, state and local level, it might be well to consider the levels of these objectives. It is probably realistic to consider program objectives at each of these levels. Our guideline might be to examine the objectives of occupational education as specified at each of these levels and determine whether or not objectives are compatable at all levels. In a program established on the basis of a Federal Act, it would seem important to examine the purpose and objectives at the national level. Office of Education Bulletin 4 titled "Objectives for Vocational and Technical Education in Agriculture",[1] states the purposes of vocational and technical education in agriculture in terms of the broad setting of our current society. This same publication also states the major objectives for this program and the contributory objectives.

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[1] "Objectives for Vocational and Technical Education in Agriculture," O. E. Bulletin No. 4, U. S. Government Printing Office, Washington, D. C., 1965.

It would seem logical that a state plan for vocational and technical education in agriculture would have objectives which are compatable with and supportive to these national objectives. And a local program's objectives would, in turn, be compatable and supportive to objectives on the state level. And though they would certainly be stated quite differently and much more specifically, a local teacher's objectives and even a student's individual objectives might be traced back to the objectives stated nationally.

An even more important guidelines for objectives, especially at the local program level, might be that these objectives are clear and specific to the point that they can be understood by the recipients of the program as well as by those persons responsible for conducting it and evaluating it. And it is only realistic to assume that even the objectives of a program must be appraised from time to time if that program is to adequately serve its purpose.

Steps in Evaluating Educational Programs

If we start with the objectives of an educational program and appraise it in terms of those objectives, then the following procedural steps might guide us:

1. State the objectives of the program in specific measurable terms so that measurable evidence of the degree to which objectives are being achieved can be obtained.
2. Determine what evidence or data are needed.
3. Secure the evidence of the degree to which objectives are being achieved. At this point we have established the degree to which our objectives are being met. Actually, by definition, we have made our evaluation. However, for evaluation to have its maximum impact on program planning, we may need to implement our evaluation by continuing through the following steps:
4. Secure facts about what is being done to achieve the objectives.

5. Identify factors which might be helping or hindering the achievement of objectives.

6. Secure evidence as to how these factors are influencing the program.

7. On the basis of this evidence, develop and try out methods of correcting weaknesses in the program.

Evaluation programs will vary in the detail with which these operations are carried out because there are always such limitations as time, money and even the attitudes of the people involved.

Some Value Theories which Might be Applied to Evaluating Educational Programs[2]

The Yardstick

If we could lay a yardstick alongside one program and mark it off at 29 inches, and then place the same yardstick beside another program and read at 31, we would know that one program was longer than the other. Not "better" than the other, but longer. However, there are some contexts in which there is a high correlation between "more" of something and "better" of something. This correlation, however, should not be assumed.

If we use the yardstick approach, we assume at least two things: (1) that the units of measure are equal units and (2) that the findings of experimental research establish a high correlation between the quantitative and the qualitative.

The Score Card

This measure might be used where units are not deemed equal but where ranking is deemed possible. For example, in judging cattle, judges may have a score card with many items. Each item has a weight and the listing of the items on the score card is a useful device for covering all points. A "perfect specimen" is conceivable but not necessary. All that is needed are examples judged superior. The end is assumed, but the need for determining absolute worth is abridged. The complex judgements result in a sort of ranking ordering - of "A" is better than "B" and "B" is better than "C".

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[2] (Taken in part from:) Gowin, D. Bob. "Value Theories and the Evaluation of Education," unpublished paper, Cornell University, 1967.

The Ideal

This measure serves as a standard of comparison. The end is not assumed, but prior values are assumed. The "ideal" specifies the conditions and serves as a norm for that which is only partially ideal. This measure is at play in much evaluation because evaluators, with their previous experience, very likely have some ideal in mind. Or as Mitchell wrote, "The ideal is imaginary but need not be fanciful."[3]

Pitfalls and Hurdles in Evaluation

Probably the first hurdle in evaluation is the very fact that "people are complicated." Therefore, when we evaluate a program designed to have an impact on human beings and when humans do the evaluating, we run into such factors as:

1. Changes in people are difficult to measure.
2. Evaluation can be damaged by bias.
3. Opinion can be influenced by faulty perceptions.
4. Evaluation is sometimes confused with measurement. Measurement is concerned with program effects that can be measured but in evaluating an educational program there are usually some judgements that have to be made.
5. Fuzzy goals often handicap evaluation.
6. People have in many situations learned to dislike evaluation, and therefore it is often avoided or even feared. Traditionally evaluation has meant a process by which individuals are rewarded or punished by other individuals who exercise power over them. However, moving from "authoritarian" to "democratic" evaluation has come to have an educational rather than a judicial purpose.

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EVALUATION IN ORNAMENTAL HORTICULTURE

William H. Annis, Head, Agricultural Education,
University of New Hampshire

Professor Annis reviewed and discussed the publication "Guidelines for Evaluating Secondary Vocational Programs in Ornamental Horticulture" by Robert Annis, Frank Wolff and Alan Robertson.

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[3] Mitchell, E. T. "Valuing and Evaluation"; Value, A Cooperative Inquiry, Lepley, Ray, ed., Columbia University Press, 1949, pp. 190-210.

Requests for the publication should be sent to the Office of Research and Evaluation, State Department of Education, Albany, New York 12224.

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INSTRUCTIONAL AREAS IN AGRICULTURAL EDUCATION

Glenn Stevens, Professor, Department of Agricultural
Education, Pennsylvania State University

Copies of the paper were distributed at the conference.

The major instructional areas in vocational and technical education in agriculture presented were:

1. Agricultural Production
2. Agricultural Supplies
3. Agricultural Mechanics
4. Agricultural Products
5. Ornamental Horticulture
6. Agricultural Resources
7. Forestry
8. Other Agriculture

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REPORTING AGRICULTURAL PROGRAMS

Joe P. Bail substituting for Jesse Taft, Field Representative, USOE, who was unable to attend due to travel restrictions.

Summary of Presentation

1. Programs of agricultural education were emphasized. In reporting, agricultural education programs call attention to related occupations, not just farming and ranching. Show those enrolled in related occupations but do not report any student twice.

2. Follow-up studies are needed to bring out the results of related agricultural programs as well as in production agriculture.

3. The projected plan for vocational agriculture and state plans should include the words "farming" and/or "agriculture."

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Glenn Lewis called attention to the imminent publication of another "Dictionary of Occupational Titles."

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QUESTIONING PANEL TO AFTERNOON SPEAKERS

Mr. Julian Carter, Supervisor, Vermont
Mr. William Kelly, Teacher Trainer, Cornell University
Prof. Warren Kelly, Teacher Trainer, West Virginia University
Mr. James Fink, Supervisor, Pennsylvania
Prof. Philip Edgecomb, Teacher Trainer, University of Massachusetts
Mr. Neal Warrington, Teacher Trainer, University of Delaware

Summary of Remarks

1. The evaluation criteria are useful in areas other than production agriculture.

2. Self-evaluation should be emphasized in the student teaching phase of teacher training.

3. In New York, employment of vocational graduates is higher than non-vocational graduates. Occupational training has produced changes in self-esteem, and other cognitive areas as measured by Prof. Helen Nelson of Cornell.

4. A greater contribution than generally realized is made in evaluating the general educational aspects of our program.

Glenn Stevens

1. Proposed (his personal feeling) one semester courses in occupational titles instructional areas. The courses could be kept vocational by emphasizing the need for individual students.

2. The seven occupational areas apply in adult instruction as well.

Dave McClay

1. Stressed the need to include agricultural mechanics in the seven instructional areas.

J. Impelliteri

1. The student's goals should be considered.

2. Experiences in secondary school be guidance experiences, not a final vocational choice, so these experiences should be broad.

William Annis

1. Stressed the need to define objectives.

Glenn Stevens

1. Stressed the need for teaching "Agricultural Resources" in every school.
2. Specialized instruction should not exclude FFA.

Dave McClay

1. Education should be both academic and vocational.

Third General Session - November 9, 1967

Chairman: Harold R. Cushman Secretary: Carl Thomas

Theme: RESEARCH IN AGRICULTURAL EDUCATION

The conference was reconvened at 8:30 a.m. by the Chairman Harold Cushman.

SOCIOLOGICAL IMPLICATIONS OF PROFESSIONALISM, UNIONISM, AND BUREAUCRACY AS OCCUPATIONAL ENVIRONMENTS

Lee Taylor, Professor of Rural Sociology and
Assistant Director of Research, Cornell University

Copies of the paper were distributed at the conference.

The major sections of the paper were:

Introduction
Professionalism as an Occupational Environment
The Professional Occupational Environment
Management and the Professional
Unionism as an Occupational Environment
Unionism and Occupational Organization
Functions and Leadership
Membership and Occupational Mobility
Bureaucracy and Social Organization
Bureaucracy and Occupational Organization
Examples of Bureaucratic Impact on Occupations

Since Professor Taylor could not stay for the entire morning session, the questioning period was held immediately following his address. Several questions about the address were raised and discussed.

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A NATIONAL STUDY OF EMPLOYMENT OPPORTUNITIES AND TRAINING NEEDS IN FARMING AND OFF-FARM AGRICULTURAL BUSINESS AND INDUSTRY

Philip Teske, Research Specialist
U. S. Office of Education, Washington, D. C.

Agriculture is a dynamic and changing industry. It is basic to the progress of America, contributing substantially to our Nation's efforts in maintaining world peace and in helping other nations to maintain democratic stability. In this important role, agriculture requires the services of competent and dedicated workers. Some of these are engaged in production agriculture, many others work in non-farming agricultural occupations to provide the supplies and services that farmers need, and to transport and market the products of the farm.

In Volume I of the 1967 edition of The Encyclopedia of Careers and Vocational Guidance, published by Doubleday and Co., Dr. Richard Swenson writes:

> "At one time farming and agriculture meant the same, but this is no longer true. Today, agriculture not only includes farming and farm management, but also many businesses and industries that produce goods and services which the farmer uses to raise his livestock and grow his crops. Agriculture also includes industries which sell raw and processed farm products to the consumer. This whole complex of activities is often called agri-business."

Dr. Swenson points out agriculture as an industry employing some 35 per cent of our Nation's labor force and offers thousands of jobs each year for youth who have appropriate training and education in agriculture. Further, Dr. Swenson notes there are over 500 different classifications within the agricultural industry. He groups these different jobs into eight major career areas: research, business, industry, education, communications services, farming and ranching, and conservation.

Increasingly complex educational needs have been developed for those who will work in the broad field of agriculture, including education not only for farming but also for those who will be employed in the non-farm occupations which involve knowledges and skills in agricultural subjects. Preparation for farming and other agricultural occupations requires changing patterns of education and training.

The ultimate objective of vocational and technical education is to prepare youths and adults for entry into, progress in, and successful and satisfying employment. The passage of the Vocational Education Act of 1963 recognized the importance of training manpower and established as a national objective the policy that persons of all ages, backgrounds and ability levels should have ready access to vocational training or retraining which is of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training.

Bulletin O. E. 81011, "Objectives for Vocational and Technical Education in Agriculture," 1966, gives the major program objectives for vocational and technical education in agriculture. These objectives reflect national awareness for those occupations related to the field of agriculture. For example, Objective No. 1 is "to develop agricultural competencies needed by individuals engaged in or preparing to engage in production agriculture"; the second of the six objectives is "to develop agricultural competencies needed by individuals engaged in or preparing to engage in agricultural occupations other than production agriculture." As you will recall, the other four objectives recognize the importance of career opportunities, training requirements, placement and advancement through continuing education, human relations, and leadership and civic responsibilities - in short - education of the total individual.

U. S. O. E. Vocational Education Bulletin No. 1, "Administration of Vocational Education -- Rules and Regulations," 1966, paragraphs 104.60 and 104.61 note:

> 104.60 - "Vocational education in agriculture ... shall be designed to meet the needs of persons over 14 years of age who have entered upon or are preparing to enter: (a) upon the work of the farm or farm home, or (b) any occupation involving knowledge and skills in agricultural subjects, whether or not such occupation involves work of the farm or of the farm home."

Section 104.61 defines an agricultural occupation as follows: "an agricultural occupation means an occupation involving knowledge and skills in agricultural subjects, which has the following characteristics:

> (a) The occupation includes the functions of producing, processing and distributing agricultural products and includes services related thereto.
> (b) The occupation requires competencies in one or more of the primary areas of plant science, soil science, animal science, farm management, agricultural mechanization, and agricultural leadership."

The rules and regulations explicitly point out the need for definitive information concerning the occupations for which a student is to be trained. Further, it is clear we must develop training programs which are realistic in the light of actual or anticipated opportunities for gainful employment.

Gentlemen: The facts are -

(1) We do not know how many people are employed in agriculture in the United States of America.

(2) We do not know how many persons are employed in each of the many career areas and job titles which comprise the agricultural industry.

(3) There is not common agreement among U. S. Departments in Washington, teacher trainers and supervisors in agricultural education, and persons in agricultural industries as to which occupations actually require knowledge and skills in agricultural subjects. Most states have made studies of the agricultural occupations but no consistent analyses concerning these occupations have had nationwide exposure and agreement.

(4) To insure a future instructional program in agricultural education which is sound and of high quality, there must be further consensus as to occupational opportunities and training needs of youths and adults.

As early as 1962, The National Center for Advanced Study and Research in Agricultural Education provided leadership in the field of agricultural education as it began emphasizing nationwide objectives for studies in agricultural occupations. National seminars were conducted. In 1963, the Center, in cooperation with the Office of Education, conducted a national study on the status of agricultural occupations studies in each of the states.

In 1964, the Center conducted a research study, "A Determination of Needed Adjustments and Extensions in the Curricular Patterns of Vocational Education in Agriculture" under O. E. Contract 5-85-009. The major objectives of this study included: (1) to identify the major occupations which require competency in agriculture; (2) to determine the agricultural competencies needed by workers in these occupations; (3) to cluster the major agricultural occupations which require similar competencies; (4) to develop and refine curricular guides and supporting materials which are most needed and feasible for the major clusters of agricultural occupations. This study, individual state studies, and the Center summary of the 25-state studies, has provided us with an initial entry and insight into further research needed.

On August 10, 1966 representatives of the Departments of HEW, Agriculture, Labor and Commerce, representatives of vocational and agricultural education, and representatives of several agricultural trade associations met to discuss the need for and the possibility of conducting a nationwide study to determine the present and future employment opportunities and training needs in farming and off-farm agricultural businesses and industries. Dr. James Hensel, Dr. Otto Legg, Mr. Hunsicker and myself represented agricultural education at this meeting.

The second meeting of the "Steering Committee" met September 19, 1966. The committee considered matters such as: (1) purposes and use of the study; (2) should the study be a cooperative venture; (3) who should do the study; (4) how should the project be developed; (5) how should the study be financed; (6) how can trade associations, employers, teacher educators, state supervisors, and other concerned groups be involved; etc.

Members of the "Steering Committee" met again on November 7-8, 1966. The committee synthesized the diverse needs of the group into eight major needs, as follows:

(1) A study of present and future employment opportunities and needs is a mandate of P. L. 88-210.

(2) A compilation of job titles and descriptions of job titles are needed by guidance counselors and vocational teachers.

(3) A clarification of job titles is needed throughout the labor force and employment agencies.

(4) A lack of uniformity in terminology found in previous studies makes it difficult to draw valid conclusions from present data and therefore more uniform terminology is needed to facilitate communication among and between the various interested and effected agencies and groups.

(5) A need exists for training standards for program planning and for the establishment of job performance levels.

(6) A method of evaluation of the performance of the worker on the job is a pressing need.

(7) Guidance personnel need information on non-professional as well as professional job categories and titles where employment opportunities exist.

(8) A document is needed upon which administrative decisions can be made relative to where training of workers may best be accomplished.

The decision was reached that the Bureau of Research would have primary responsibility for the design, execution and support of the study. The Departments of Labor, Commerce and Agriculture will cooperate and assist with the study.

As a result of the preceeding activities, a research planning proposal has been submitted to the Bureau of Research. The major purpose of this proposal is to plan and coordinate a nationwide study concerning employment opportunities and training needs for workers in agriculture. The specific objectives of this project are:

(1) To secure joint planning and cooperation toward the national study from the USDA, Commerce, Labor, teacher educators, supervisors, school administrators, and the major trade associations in agricultural businesses and industry.

(2) To design a proposal which will provide a national focus on:
  (a) identifying existing major occupational categories and job titles in agricultural businesses and industries; including development of a schematic arrangement of the job titles and accompanying job descriptions for use by vocational teachers, guidance personnel, training program planners, census bureau data collection agencies, labor employment offices, etc.
  (b) to determine manpower requirements in farming and off-farm agriculturally related occupations, consisting of:
    1. an analysis of changing and emerging agricultural occupations at all levels of competence;
    2. an analysis of the number of persons presently employed and the education required for entry into and advancement within identifiable job clusters;
    3. an analysis and projection of employment, economic, sociological and demographic trends in relation to the broad field of agriculture.
  (c) to develop a master plan for vocational education in agriculture. Segments of the plan could involve course training standards for agricultural job titles.
  (d) to develop and conduct pilot training programs based on the course training standards concept and to evaluate the job performance of graduates of such programs.
  (e) to provide a mechanism for updating agricultural occupational data on a continuing basis.

(3) To establish and work with an advisory committee in planning the nationwide study. The proposal suggests an advisory committee of:

USDA -2
Commerce - 2
Labor - 2
USOE - 2
NVATA - 2

Teacher Educators in Ag - 2
State Supervisors - 2
Guidance - 2
Ag Trade Association - 4
School Administrators - 2
22

Examples of End Products (Overhead Projections)

1. Schematic Arrangement of Career Fields and Job Titles
2. Training Standard
   (a) Where they fit in program planning
   (b) What they might look like and how used
3. Course Guide

* * *

OFFICIAL ABSTRACT

Proposal Number: 7-8459

Recommended Funding Authority: Title IV, P. L. 89-10, Elementary and Secondary Education Act as Amended

Title: A Planning Study to Determine the Feasibility of A Research Project Concerning Employment Opportunities and Training Needs in Farming and Off-farm Agricultural Business and Industry

Principal Investigator: James W. Hensel, Specialist, Agricultural Education, The Center for Vocational and Technical Education

Institution: The Center for Vocational and Technical Education, The Ohio State University, 980 Kinnear Road, Columbus, Ohio

Duration: 5 months Total Federal Funds: $9,655 FY '67 Funds: $9,655

OE Project Officer: Dr. Philip Teske Telephone Extension 36629

Purpose of Project:

The major purpose of the study is to plan and coordinate a nationwide study to determine the employment opportunities and training needs in farming and off-farm agricultural business and industry. The planning study will enlist the combined efforts of the U. S. Departments of Agriculture, Commerce, and Labor; Office of Education and leaders in the field of Agricultural Education in developing a long-range project for education in Agriculture.

Contribution to Education:

The project will provide the background, coordination, and design for a massive attack on the growing problem of the identification of employment opportunities and training needs in farming and off-farm agricultural businesses and industry. The project will build a framework for coordinating the educational efforts of several U. S. Departments, teacher educators, and supervisors with agricultural business and industrial firms. The success of the developmental project will be measured in terms of the design, funding, and operation of the national study.

Procedures:

A review of the literature will be conducted. An Advisory Committee of representatives from the Departments of Agriculture, Commerce, Labor, Office of Education, agricultural educators and others will assist the principal investigator in designing the national study. The principal investigator will work with all of the agencies to be involved in the national study. His efforts will be to coordinate activities on all levels, establish guidelines for the conduct of the study, and to design and submit a proposal for the major project concerning employment opportunities and training needs in Agriculture.

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Dr. Teske distributed copies of the following materials at the conference:

1. "Official Abstract - A Planning Study to Determine the Feasibility of a Research Project Concerning Employment Opportunities and Training Needs in Farming and Off-Farm Agricultural Business and Industry." (Included at end of Dr. Teske's presentation.)

2. "Program Planning Flow Chart."

A question period was held immediately following Dr. Teske's presentation.

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ABSTRACTS OF STUDIES IN AGRICULTURAL EDUCATION 1966-67

David Shontz, Professor, Teacher Education,
University of Rhode Island

Copies of the following three papers were distributed and discussed by Professor Shontz:

1. "Abstracts of Research Studies in Agricultural Education Completed in 1966-67 in the North Atlantic Region."

2. "Research Studies in Progress in Agricultural Education in the North Atlantic Region."

3. "Summary of Research in Agricultural Education in the North Atlantic Region, 1966-67."

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AGRICULTURAL EDUCATION RESEARCH IN 1966

Glenn Stevens, Teacher Educator, Pennsylvania State University

Professor Stevens passed out copies of "Agricultural Education Research in 1966: A National List of Studies by Author, Title, and institution." He also spoke on several sources of information on research and other projects.

QUESTIONING PANEL

Prof. A. H. Krebs, University of Maryland
Prof. Arthur Berkey, Cornell University
Prof. Samuel Curtis, Pennsylvania State University
Mr. Guy Cain, West Virginia
Mr. Fred Myer, Delaware

A question and discussion session was held on the theme of the session.

Fourth General Session - Thursday, November 9

Chairman: R. C. Butler Secretary: C. Drawbaugh

Theme: NEW DEVELOPMENTS IN CURRICULUM AND RESEARCH

The conference was reconvened by the Chairman, R. C. Butler, at 1:30 p.m.

Symposium - Curricula for Post-High School Technical Programs in Agriculture

AGRICULTURAL ENGINEERING TECHNOLOGY

Edward B. Mott, Chairman, Dept. of Agricultural
Engineering, State University of New York at Cobleskill

In 1965, the Agricultural Engineering Technology Department at Cobleskill received from the Department of Health, Education and Welfare a charge or plan of development of the Agricultural Equipment Technology Guide for a two-year post-secondary program, to educate skilled technicians in the knowledge, application, function, production and utilization of agricultural production equipment. This charge consisted of over twenty steps. However, they might be briefly stated as follows:

1. Define and support the need for the training of this type of technician.

2. Develop courses in the major field, and supporting courses in mathematics, sciences, and related courses with a rigor befitting a technical program.

3. Support for suggestions in Guide to be aided through visitation to 3 to 5 institutions having outstanding programs. (This was done by visiting about 10 such places as well as a similar number of manufacturing

facilities. The reason for company visitation was to determine what they might be looking for in the prospective employee).

4. Write a description of the type of student who might enter the program and the qualifications of the teacher who might teach him.

5. Provide diagrams and plans for all teaching facilities.

6. Provide a complete bibliography of instructional materials, texts, reference material and audio-visual materials.

Graduates of this curriculum can expect to find employment in many areas of the agricultural production and equipment field. Each area may require somewhat different abilities and different specialized knowledge and skills for a successful career. Most of these differences will be learned by continued study on the job or in part-time study to master the specifics of a special field. The following sections describe some of the major areas or clusters of job opportunities for agricultural equipment technicians and some examples of the work they may do in each:

1. On-farm employment, as an owner, or employee, or contractor engaged in agricultural production. The ultimate user of agricultural equipment is the producer of products on a farm. The agricultural equipment technician may work for himself on his own farm, be a member of the family which owns or operates a farm, or be employed to work on a farm operated by a family, cooperative or corporation. Owners of agricultural equipment, who may or may not operate farms, increasingly are providing contract ("custom") planting, spraying, crop dusting, harvesting, land levelling, irrigating and other special mechanized services; and who need highly skilled technicians to provide the services. Examples of work done by the technicians in on-farm employment are:

   (a) Owner and operator of the equipment
   (b) Contractor of services requiring equipment
   (c) Supervisor of mechanical operations
   (d) Supervisor of contracting operations
   (e) Technical specialist for special kinds of equipment
   (f) Supervision of machinery servicing, operation and maintenance
   (g) Farm mechanical specialist
   (h) Contract "custom" operator and manager

2. In the agricultural equipment industry, as a representative of a manufacturer, or as a part of a dealership or distributorship, as owner or employee. Some examples of work done by agricultural equipment technicians are:

(a) In the research and development or sales department of a manufacturer as:
  (1) Unit or systems tester
  (2) Field testing technician
  (3) Equipment demonstrator and trouble shooter
  (4) Equipment salesman
  (5) Equipment parts and service specialist
  (6) Field service technician
  (7) Equipment applications specialist

(b) In a sales department of a distributor or dealership:
  (1) Sales Manager - Dealership, branch or distributor
  (2) District Manager - Dealership, branch or distributor
  (3) Farm Equipment Salesman - Dealership, branch or distributor
  (4) Industrial Salesman - Dealership, branch or distributor
  (5) Farmstead Mechanization Salesman - Dealership, branch or distributor
  (6) Lawn and Garden Equipment Salesman

(c) In a service department of a distributor or dealership:
  (1) Service Supervisor - Dealership, branch or distributor
  (2) Company or Distributor Service Representative
  (3) Serviceman and Equipment Specialist
  (4) Diesel Serviceman
  (5) Hydraulics Serviceman
  (6) Farmstead Mechanization Serviceman or Specialist
  (7) Set-up and Delivery Serviceman

(d) In a parts department of a distributor or dealership:
  (1) Parts Supervisor - Dealership, branch or distributor
  (2) Parts Salesman - Dealership, branch or distributor
  (3) Partsman
  (4) Warehouse Supervisor
  (5) Warehouseman

The foregoing are only some examples of the large number of various kinds and descriptions of employment opportunities for highly skilled agricultural equipment technicians.

Activities that the Agricultural Equipment Technician May Perform

1. Use principles of physics and mathematics as they apply to the operation of engines and farm equipment in relation to such things as ignition systems, horsepower requirements and speeds of various types of farm machines.

2. Analyze and interpret information obtained from such testing devices as a dynamometer, the diesel pump test stand and the various electrical testing pieces used on farm tractors and equipment. This requires

evaluation based on charts accompanying the equipment, information found in operators' manuals, or both.

3. Analyze and diagnose special problems which relate to specialized areas, such as hydraulics on farm machines.

4. Demonstrate machines to potential buyers; show operational features to new purchasers.

5. Determine when parts in a given machine need replacement; use precision measuring devices to determine amount of wear and to position new parts.

6. Locate malfunctions in a given machine and make repairs quickly and efficiently.

7. Use knowledge of the machines and business practices to order inventory, display and sell parts for farm equipment and tractors.

Student Selection

Students admitted to the program should have had at least one year of high school mathematics and one year of physical science or a pre-technical program. In addition, a farm background and/or vocational agricultural training is desirable.

The curriculum is designed for high school graduates with special interests and capabilities, who can think in an orderly, logical manner. They must be capable of visualizing specific mechanical problems peculiar to the equipment studied, and they should possess the ability to prognosticate in their work with the various types of machinery. A reasonable degree of maturity and seriousness of purpose as well as a desire and enthusiasm for their technical specialty is therefore required if they are to master a difficult program and develop their capabilities to the optimal degree.

Course Relationships

The sequence of courses in a two-year curriculum is as important as the content in the courses. In general, the subject matter in the curriculum is carefully correlated in groups of concurrent courses. This is in sharp contrast to the arrangement of professional curricula in which basic and somewhat unrelated courses make up the first part of the study program and in which specialization is deferred to subsequent terms.

In technical curricula, it is mandatory that specialized technical course work be introduced in the first semester. Delaying this introduction, even for one semester, imposes serious limitations on the effectiveness of the total curriculum. Several important advantages accrue from the early introduction of the technical speciality:

1. Student interest is stimulated by practical aspects of instruction. If the first term consists entirely of general subjects -- i.e., mathematics, English, social sciences -- students often lose interest.

2. It is possible to obtain greater depth of understanding in specialized subjects in the latter stages of the two-year program.

3. Practical applications of mathematics and science are made throughout the technical courses.

It should be recognized that further on-the-job training in his special area of employment is necessary after the graduate of this program has taken a job. This type of training is provided by all major farm equipment companies today and is available to workers at the dealership as well as at the company level.

In the first semester of this curriculum, the courses have been designed to supplement each other as well as to provide a basis for study in subsequent semesters. The knowledge and skills learned in Drawing, Sketching, and Diagramming can be utilized in courses occurring in later semesters, e.g., Electricity, Hydraulics, Principles of Farm Mechanization and Retailing. Welding skills obtained in the welding courses are used in the repair phase of the machinery course. The physics course provides the scientific background for electricity, gas engines, hydraulics and diesels.

Tractors are the basic machine in farm and light industrial mechanization. In Farm Power, in the second semester, the student learns the basic principles of the gasoline engine and how to repair and service gasoline tractor engines.

Because of the increasing use of mounted and hydraulic-controlled equipment, hydraulics are a vital part of today's farm and light industrial tractors. The course in agricultural hydraulics presents the basic principles of hydraulic power used in these tractors.

Work in the farm machinery courses deal with planting, tillage machines, and with harvesting equipment. Laboratory work in the course includes field operation and adjustment of the various machines studied. Other laboratories emphasize principles of operation, set-up, pre-delivery service, and repair work.

A course is included in the curriculum to teach students the business aspects of the farm machinery business. Keeping and interpreting business records and accounts is taught in the accounting course during the second semester.

The Curriculum

A properly designed curriculum must be developed and maintained in order to produce the technician capable of performing the services needed in the area of agricultural equipment. Each course is planned to develop the student's knowledge and skills, and each is integrated with other courses in the curriculum to provide a logical sequence of course work that aims to develop competent, well-qualified technicians.

Each course serves to lay a firm foundation for subsequent satisfactory performance as well as growth in responsibility. Because of the speed with which technologies change and because of the rapidly changing requirements for technicians in agricultural equipment, it is imperative that the curriculum remain flexible. All courses, whether in stages of development or in stages of actual operation, need constant review and, if necessary, modification. The extent to which we are able to prepare graduating technicians for immediate jobs in industry will depend upon our ability to incorporate rapid changes in technological progress into curriculums which are flexible enough to accommodate them.

Principles of Farm Mechanization

This course is designed to afford students the opportunity to plan and develop efficient layouts of farm buildings and desirable arrangements of the equipment within the buildings after considering efficient flow of materials. The student learns the basic types of equipment available as well as the servicing and installation of this equipment. Since most dealers handle at least one item in this area it is important that this be included in Agricultural Engineering Technology.

Since the graduate of this curriculum will assume a role in society, courses in communication skills, economics, and American Community have been included. These courses enable the student to become a better informed citizen and assist him in communicating with others.

General Planning of Facilities

Laboratory and related classrooms, offices, and storage facilities required for teaching Agricultural Equipment Technology presents a few special or unusual conditions peculiar to the technology. Any well-constructed building with suitable utilities may be used. However, if a building is to be constructed to house an Agricultural Equipment Technology program, plans should include maximum use of portable equipment to attain greatest flexibility and utility of space.

Adequate laboratory and physical facilities for Agricultural Equipment Technology are vital to the program. To teach the basic principles of agricultural machines, there must be sufficient space, and the numbers of students must be limited in laboratory sections if good instruction is to result. Twelve to fifteen students in any one laboratory section is all that can obtain valuable experiences with one instructor.

The physical facilities for teaching Agricultural Equipment Technology should be carefully planned. Since many of the machines used for instruction will be large, it is imperative that the laboratories have ample floor area, sufficient ceiling clearance, and adequate doors.

If at all possible it is most desirable to have individual rooms for many of the areas of instruction as for example: painting, welding, diesels, hydraulics and electricity. These require specialized equipment or controlled conditions.

It is important in Agricultural Equipment Technology to provide facilities for the field operation of the various farm and light industrial machines.

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ANIMAL SCIENCE TECHNOLOGY

Herman Brant, Associate Professor,
State University of New York at Delhi

Summary of Presentation

Professor Brant discussed animal science technology as a course of study at SUNY at Delhi leading to the Associate Degree.

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FISHERY TECHNOLOGY

David Shontz, Regional Chairman, AATEA, and
Professor, Teacher Education, University of Rhode Island

Summary of Presentation

Professor Shontz distributed and discussed the brochure, "Challenge, A New Program in Commercial Fisheries at the University of Rhode Island," and the mimeo "University of Rhode Island Associate Degree Program in Commercial Fisheries."

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FOOD HANDLING TECHNOLOGY

Richard Lalley, Instructor, University of Connecticut

Summary of Presentation

Mr. Lalley discussed and distributed copies of the research project "Potential for Food Handling and Distribution Training in Connecticut" which was conducted in cooperation with the U. S. Office of Education. A secondary curriculum in food handling was developed through the project.

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FORESTRY TECHNOLOGY

David Larrabee, Graduate Assistant,
Pennsylvania State University

Summary of Presentation

Mr. Larrabee substituted in the absence of Prof. Richard Allison. He discussed a U. S. Office of Education sponsored project which involved development of a suggested two-year post-high school curriculum in forest technology.

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A PROGRESS REPORT ON PLANNING, ORGANIZING, AND DEVELOPMENT OF CURRICULUM MATERIALS IN AGRICULTURAL EDUCATION

Charles Wiggins, Associate, Bureau of Agricultural
Education, State Department of Education, New York

Mr. Chairman and members of the Seminar and Research Conference: It is a pleasure and a privilege to meet with you to speak on the subject of Planning and Organizing Courses of Study in Specialized Areas at the High School Level.

The business of farming began many years ago without specialization. The teaching of agriculture also began many years ago without specialization. The teaching of agriculture without specialization was the best that was possible at this time and achieved the desired objectives. We have a grand record of accomplishments in the teaching of vocational agriculture during the past years. In a minor way, teachers were able to give specialized instruction through the occupational experience programs of their students, but for the most part, all students received instruction in all of the major areas of agriculture.

As agriculture has become more specialized, so has the teaching of it in many of our New York State Departments of Agriculture. The Vocational Act of 1963 changed the responsibility for instruction in vocational agriculture to include the broader area for training in areas where a knowledge of agriculture is necessary.

The present concept in the teaching of vocational agriculture in New York State is to teach basic agriculture in grades 9 and 10, and specialize during grades 11 and 12. In the ninth and tenth grades agriculture is taught on a single period per day, one credit per year basis. In some schools where ninth grade agriculture is not taught, a combination of ninth and tenth grade agriculture is taught during the tenth grade on a two-period per day, two-credit per year basis.

The areas of specialization during the 11th and 12th years, as taught in New York State, are as follows: Farm Production and Management, Conservation, Agricultural Business, Agricultural Mechanization and Ornamental Horticulture.

Farm Production and Management is designed to primarily prepare students for a career in Production Agriculture, however, some students may find employment in agriculturally related off-farm areas.

Conservation includes the areas of forestry, wildlife management, soil and water management, outdoor recreation and related mechanics.

Agricultural Business is designed to prepare students to work in agricultural businesses, and is usually combined with one of the other areas of specialization in which the technical agricultural subject matter is included.

Agricultural Mechanization prepares students for occupations in the various fields of Agricultural Power and Mechanics. Graduates in this speciality will normally find employment in the sales and service of farm machinery.

Ornamental Horticulture provides training in nursery management, landscaping, turf management and floral production and design.

While the study of these speciality areas is terminal for many students, some graduates will continue their education beyond high school in colleges and/or universities.

There are five major problems in the change-over to specialized instructional areas. They are: (1) securing qualified teachers, (2) securing adequate facilities, (3) securing adequate equipment, (4) a large enough student base to ensure adequate class size, (5) becoming too specialized.

In attempting to solve these problems, the following methods are being tried. Solutions are not complete, since in most cases, some years are necessary before solutions are reached. In securing trained teachers the following methods are being tried: (1) in-service training to update and "retread" teachers to the new area of instruction, (2) a changed college preparation to allow greater specialization in college through the use of electives, (3) employment of occupationally competent persons, and then training them to be teachers.

The use of 88-210 funds, and the centralization of smaller schools into larger units has made available many of the needed facilities and much of the needed equipment.

This consolidation of smaller schools into larger units called area centers has resulted in a large enough student base to permit division of agriculturally interested students into specialization areas. A typical area center includes occupational education in the following area: (1) Agriculture, (2) Business, (3) Distributive Education, (4) Occupational phases of Home Economics, (5) Trade and Industrial Education. In an area center, Agriculture is a part of the entire occupational program. This will permit an inter-vocational mix through which agricultural students may obtain a portion of their training in areas other than Agriculture such as accounting in the business department or welding in the trade and industrial department. In similar fashion, students from other departments may obtain needed training in the Agriculture Department. An example of this would be Home Economic students being trained in flower arrangement in the Agriculture Department. Additional work needs to be done in developing this inter-vocational mix, and attempts are being made to establish pilot programs.

Our Agricultural Education Bureau looks very carefully at facilities for new area centers to be certain that they possess adequate space and needed equipment. Space will include a land laboratory of at least 5 acres, and in some cases as much as 50 acres. Provisions for an occupational experience program for each student in amount of at least 250 hours is necessary. When several agricultural specializations are taught in one area center, it is sometimes possible to plan for the use of shared shop and classroom facilities. Thus, Conservation, Ornamental Horticulture and Farm Production and Management might share one shop and classroom. It has been found that it is not desirable for shared use of an agricultural mechanization shop.

In the problem of becoming too specialized, the concept of training for a cluster of occupations within a speciality has been followed. In this manner, a student in Ornamental Horticulture will be trained for more than turf management in that he will receive training in the other areas such as landscaping and greenhouse management. A student specializing in Conservation will receive training in the many areas included within this specialization.

The New York State Education Department, Bureau of Agricultural Education, provides sample or pattern guides in the areas of specialization for schools to use in developing their own courses of study and for the planning of needed facilities and equipment. The guides are developed by committees of selected teachers of agriculture working with consultants, and under the direction of the Bureau of Vocational Curriculum with assistance from the Bureau of Agricultural Education. This work is reviewed by members of the teacher training staff at Cornell University.

A typical guide contains the following information: (1) purpose of guide, (2) introduction, (3) grade level taught, (4) time allotments, (5) course sequences, (6) credits, (7) suggested supply lists, (8) suggested equipment lists, (9) space requirements, (10) work experience program suggestions, (11) cost estimates, (12) instructional and resource materials, list and (13) course of study. Each of these publications are to be 8 1/2" x 11". Each will have a cover illustration descriptive of the field, and covers will be color-coded in various pastel shades.

The following is a report of progress in the development of these guides:

1. A Guide for Planning and Organizing Programs in Agricultural Mechanization. A manuscript has been developed and is being reviewed. No date has been set for distribution. The cover is done, and the facilities section is being edited.

2. A Guide for Planning and Organizing Programs in Conservation. A draft manuscript has been prepared and is being reviewed. No date has been set for distribution.

3. A Guide for Organizing and Teaching Courses in Farm Production and Management. A writing team worked during August 1967 to develop a first draft. This is being reviewed and probably will need some revision before final approval.

4. A Guide for Planning and Organizing Programs in Ornamental Horticulture. This has been typed in final form, and will be ready for distribution this winter.

5. Agricultural Business Guide. The guide titled Agricultural Business Course of Study will be the first in the "second generation" of course of study publications. This contains only course of study suggestions. All preparatory work is completed, and it is ready to be printed. Distribution should be made this winter.

6. Agricultural Education Programs for Pupils with Special Needs. A development committee met in August 1967. Materials produced will either be printed in a separate publication for agriculture, or included in a bulletin which will cut across subject matter lines in occupational education. It is designed for use by teachers of classes for pupils with special needs.

7. Agricultural Careers Publication. A writing team has developed materials describing the various courses in vocational agriculture, and available career opportunities in the several fields. The publication is designed for use by pupils, parents, guidance workers and administrators. It is designed to serve as a recruiting device, and to stimulate local development of factual and up-to-date career leaflets in the field of agriculture.

   It will contain an introduction to the study of vocational agriculture, plus chapters dealing with the five general areas of agriculture as taught in New York State.

8. FFA Leadership Training Manual. Development of a revised manual was begun two years ago, and completed this Fall. This manual is being printed and will soon be ready for distribution. It will be 8 1/2" x 11" in size punched for use with a three-ring binder.

Mr. Wiggins distributed copies of a summary of his presentation.

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COMPUTER ASSISTED INSTRUCTION

Joseph T. Impellitteri, Assistant Professor,
Industrial Education, Pennsylvania State University

Copies of Professor Impellitteri's paper were distributed at the conference.

The paper focused on the following five areas within the general field of computer applications in education:

1. A general description of computer-assisted guidance and counseling.

2. A discussion of the number and types of computer-assisted developments currently underway across the nation.

3. The nature of the program at Penn State University.

4. Tentative results of experimentation and field trials using CAI and other computer applications.

5. Some implications and projects for the future.

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NEEDED RESEARCH IN AGRICULTURAL EDUCATION

Philip Teske, Research Specialist,
U. S. Office of Education, Washington, D. C.

Dr. Teske discussed areas of needed research in agricultural education. He also distributed and discussed the mimeo "The Division of Comprehensive and Vocational Education Research." Focus of the discussion was on the organization and purposes of the various research teams of the branches within the Division.

Research Reporting Session

The conference reconvened at 7:30 p.m. with Prof. Joe P. Bail as chairman.

Information about the research studies reported below should be requested from the person making the presentation.

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AUTOMATIC CONTROLS IN AGRICULTURE

Robert T. Benson, Graduate Assistant,
Pennsylvania State University

A copy of the report was distributed at the conference.

¶ ¶ ¶ ¶ ¶ ¶

A PLAN TO MEET THE VOCATIONAL EDUCATION NEEDS OF CITIZENS OF A LOW INCOME COMMUNITY OF APPALACHIA

Charles Rhodes, Research Assistant, West Virginia University

A copy of the report was distributed at the conference.

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EDUCATIONAL INNOVATIONS AMONG EXPERIENCED TEACHERS OF AGRICULTURE IN NORTH CAROLINA

Willie T. Ellis, Graduate Assistant, Cornell University

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DEVELOPMENT AND EVALUATION OF OCCUPATIONAL INFORMATION IN AGRICULTURE

Norman K. Hoover, Teacher Educator,
Pennsylvania State University

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THE SYSTEM OF AGRICULTURAL EDUCATION IN YUGOSLAVIA AND ITS EFFECT ON AGRICULTURE MANPOWER DEVELOPMENT

Theodore Buila, Research Assistant, Cornell University

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Fifth General Session - November 9, 1967

Chairman: Glenn Lewis   Secretary: Arthur Berkey

Theme: TEACHER EDUCATION AND SUPERVISION

The conference was reconvened by the Chairman, Glenn Lewis.

Symposium - What's New in Teacher Education

Moderator: William Drake, Cornell University
Members: Ralph Barwick, University of Delaware
Charles Drawbaugh, Rutgers University
David McClay, Pennsylvania State University
Claude McGhee, West Virginia University
William Annis, University of New Hampshire
Lyle Wicks, Cornell University

The moderator, William Drake, introduced the panel.

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DON"T DISCOURAGE PROSPECTIVE AGRICULTURE TEACHERS

Ralph P. Barwick, Head Teacher Educator,
University of Delaware

A copy of the paper was distributed at the conference.

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WHAT'S NEW IN TEACHER EDUCATION IN AGRICULTURE

Charles Drawbaugh, Teacher Educator, Rutgers University

Copies of the paper and "New Undergraduate Program in Vocational Technical Education in Environmental Science" were distributed at the conference.

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WHAT'S NEW IN PENNSYLVANIA

David McClay, Chairman, Agricultural Education,
Pennsylvania State University

Summary of Remarks

1. An increasing number of graduates are returning to work on graduate programs.
2. Presently have 4 staff specialist positions.
3. There are 13 in-service centers in schools and 26-30 off-campus centers.
4. Work in facilities and programs has been done with 70 area vocational schools. Twenty-nine of 70 of these schools plan some type of agricultural program.
5. Approval is pending for a new agriculture course, "Education in Agriculture in Developing Countries."

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WHAT'S NEW IN WEST VIRGINIA

R. C. Butler, Chairman, Agricultural Education,
West Virginia University

(Dr. Butler narrated in the absence of Dr. McGhee)

I have two things that are new in West Virginia teacher education. I will report the main features of each and if you have questions pertaining to an individual situation, we shall treat it later. (Work - Study the second thing given in next session by Dr. W. G. Kelly).

The first of these is what we call "seven ways to educate a vo-ag teacher." We are quite pleased with this particular part of our curriculum because we have been rather straight laced and channeled into a single curriculum - that leading to what we once called the traditional teacher of vocational agriculture. He was a breed unto himself. Since 88-210 in 1963 our potentials in teacher education have been strengthened. That is, much more is expected of us. We not only train teachers for production and management but the off-farm facets - called agricultural industry by some - has been added. Dr. Butler, Dr. Goos, and others in West Virginia over the years have advocated what we might call a saber tooth curriculum.

With this in mind, we set out to design a curriculum for each of seven areas of vocational agriculture. That is, we wanted to train teachers where the need existed and where trainees were available in:

1. Production and management
2. Animal processing (1)
3. Agricultural mechanics
4. Agricultural sales and service
5. Conservation
6. Horticulture produce industry
7. Ornamental horticulture (1)

Each of these areas is a minor.

We got flexibility; since we got it, the college itself has gone almost completely "saber tooth" with very few specific requirements. And if we had ours to do over, we would build in even more flexibility.

Since this program was just started September 1, we presently have but few people on it, but we are hopeful for the future of the program.

At one time our majors had a minor in biological sciences but no longer is this true. Our graduates teaching certificate will read: vocational agriculture - minor.

Should the graduate not be placed as a special teacher, then because of the case in agricultural courses, he is qualified to accept a position in the regular vocational agriculture program.

"We believe" in regard to this plan as constructed. When the designs are executed, we will have the way clear to broaden our horizons by half and up our dimensions by 2 - Butler. I, with the permission of my peers, more especially those who are responsible for funds, plan to and are "hitting" the wood and the country to drum trade for those who would be teacher of vo-ag.

Copies of "Seven Way Curriculum for the Education of Teachers of Vocational Agriculture" were distributed.

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TEACHER EDUCATION AT NEW HAMPSHIRE - NEW PROGRAMS AND INNOVATIONS

William H. Annis, Head, Agricultural Education,
University of New Hampshire

A summary of the presentation was distributed at the conference.

* * *

IN-SERVICE TRAINING

Lyle L. Wicks, Instructional Materials Specialist,
Cornell University

My responsibility as a member of this panel is to discuss programs of in-service education for teachers of agriculture. Beginning with Dean Johnson's keynote address on Wednesday, we have been reminded repeatedly of the need for continuing educational opportunities. The basis for these needsare fairly obvious.

Experienced teachers find it necessary to be constantly updated to keep pace with a changing agriculture to minimize the tendency to teach yesterday's practices for tomorrow's needs. The emerging areas of subject matter specialization have become the "emerged" areas, and many of our teachers trained under the production-management concept are hardpressed to adjust their abilities to include a teaching knowledge of one or more of these subject matter specialities.

Expanding demand for teaching personnel is in conflict with limited supply. This has brought into the profession men with training and experience, but who lack the professional course work required for certification.

Beginning teachers encounter special problems in adjusting to their new roles. It is only fair to say at the outset that my observations regarding in-service education are drawn largely from the new AATEA publication, TEACHER EDUCATION IN AGRICULTURE, and from the observed programs operative in New York State. Those of you who are familiar with these sources of information will do well to spend the next few minutes in pleasant reflection of last evening's activities.

In a 1959 United States Office of Education publication, Dr. Cardozier does an excellent job in pointing up the major areas for consideration in developing an adequate in-service teacher education program. In summary, he suggests a combination of the following procedures. (1) Beginning Teacher Follow-up, (2) Visits with Experienced Teachers, (3) An Adequate Program for Graduate Study, (4) Special Short Courses, (5) Participation in Teacher Conferences, (6) Guidance in Research and Evaluation, (7) Professional Writing by Teacher

Trainers and (8) Utilization of a Subject Matter Specialist.

Limitations in the availability of funds and personnel preclude the possibility for full consideration of all the suggested areas by any one state. The tendency has been and will most likely continue to be one of giving priority to services which are deemed to be most rewarding in relation to the resources available. We are all keenly aware of the limitations placed on in-service education programs by the agencies with whom we must negotiate. In New York State, for example, the Division of Occupational Education places emphasis on funding innovative rather than on-going programs. The College has expressed a reluctance to finance in-service education programs for teachers of agriculture by reason of inability to provide similar services to teachers in other subject matter areas.

I have attempted to cite some of the major objectives and limitations which have governed our in-service education program in New York State.

Half-day workshops are conducted on a regional basis each fall in cooperation with Bureau of Agricultural Education personnel. The pattern has been to update participants on new developments in operational procedure rather than technical agricultural training. Heavy involvement by the Cornell staff in the activities of the three-day June Conference provides both technical and professional information.

Summer school course offerings are designed to meet the needs of people interested in working toward certification, as well as providing opportunity for vocational training. In the past three years, 23 different courses have been offered of which 6 are classified as professional and 11 in the new subject matter areas, namely, ornamental horticulture, conservation, business and mechanization.

During the past summer, the recently organized in-service unit of the Bureau of Teacher Education funded two vocationally oriented courses directed by the Division of Agricultural Education and conducted by other departments in the College of Agriculture. In brief, the funding covers tuition and fees to the institution conducting the course and provides up to $60.00 per week to the student for transportation, room and board. Teacher eligibility requirements are as follows:

1. Applicants must have been regularly assigned occupational education teachers in a New York State school during the 1966-67 school year and must be assigned to teach in such a school during the 1967-68 school year.

2. Applicants must be recommended by their superintendent or school administrative officer authorized to act on behalf of the superintendent.

3. Applicants must be accepted by the college or university of their choice offering Department-sponsored courses.

4. A person can receive only one grant during any one semester.

In addition to the Cornell programs, five one-week training sessions were approved at two of the Agriculture and Technical colleges.

In every instance where courses were offered, participants and college staff members were equally complimentary in evaluating the results.

Another major area of endeavor designed to meet in-service training needs, and the one, incidentally, of major personal concern, is that of providing a functional instructional materials service. I am envious of the excellent work being done by such states as Pennsylvania, Ohio and Illinois. The demand for assistance of this nature has increased proportionately with the emergence of the new subject matter specialities. To get on the band wagon, we anticipate, beginning July 1, 1968, the introduction of a subscription service. In addition to assistance currently provided to teachers, we have hopes that this expanded program will:

1. employ the services of an advisory committee to evaluate existing materials, locate new materials and make recommendations for preparation of new instructional aids.

2. employ subject matter specialists (including qualified teachers) to prepare materials.

3. develop slides, film strips, overhead projectuals and other instructional media for teachers.

4. purchase selected materials for redistribution to teachers.

5. assemble for redistribution materials from other sources.

6. provide optional services.

Make available on a cost basis, the following items:

1. Multiple copy supplies of resource materials from the Division of Agricultural Education.

2. Film strips, slides, projectuals, specimens, etc., prepared by, or in cooperation with, other individuals or agencies.

3. Assemble for redistribution based on the recommendations of the advisory committee, "for sale" materials from other sources.

I should add that this decision was approved by ATANY and has the recommendation of the faculty of the Department of Education at Cornell.

With regard to the Instructional Materials Service, the following comment by Jim Hanneman of the Agricultural Education Department at Michigan State is worthy of serious consideration:

> "Last, but not least, many of the teachers deplore the lack of organized state leadership to remove the state line barriers in the development and distribution of instructional materials. Almost every state has a committee developing appropriate instructional materials but the distribution policy for the materials seems to stop at the state boundary. Many of the teachers expressed a sincere desire for an individual or organization to gather appropriate materials and inform teachers of their availability, cost, and appropriateness for vocational agriculture."

In conclusion, it would seem appropriate that individuals concerned with the preparation and distribution of instructional materials representing the various states who are here today, would do well to make a positive effort toward coordinating their efforts.

* * *

Symposium - What's New in Supervision

Moderator: L. L. Turner, Connecticut
Members: Philip A. Haight, Massachusetts
Harold L. Noakes, New York
Martin L. Mitchell, New Hampshire
Ray Northup, Rhode Island
Raymon Cunningham, West Virginia

* * *

WHAT'S NEW IN RHODE ISLAND

Ray Northup, Supervisor,
Rhode Island State Department of Education

Summary of Remarks

1. A number of agriculture departments now have 2-3 teachers.

2. Seven high schools have had new vocational wings added to provide comprehensive education.

3. A trade school is being developed.

4. A greater proportion of the supervisor's time is spent in planning.

* * *

WHAT'S NEW IN MASSACHUSETTS

Philip A. Haight, Supervisor,
Massachusetts State Department of Education

Summary of Remarks

1. The 10 requirements for agricultural departments are being enforced.

2. The shortage of teachers for new programs makes updating and approval in minors a problem.

3. Seven new area vocational schools are completed and eleven are pending. No agriculture programs are planned for these schools unless the program can prepare students both for vocations and college. How can the problem be solved?

   Responses by the Members:

   (a) Terminal students go to the vocational center and college bound students go to the regular school.

   (b) Provide shared time - 1/2 in regular school, 1/2 in area vocational school.

   (c) Provide a comprehensive high school.

   (d) No student should be considered "terminal."

* * *

WHAT'S NEW IN NEW YORK

Harold L. Noakes, Chief,
Bureau of Agricultural Education, NYS Dept. of Education

Summary of Remarks

1. An exciting time of change exists where old practices should be adapted to meet new needs.

2. Teamwork between the Agricultural Education Bureau, teachers, and Cornell staff, is being emphasized.

3. The New York Department of Education has been organized into five Bureaus. This provides more time for innovation and development of programs.

4. There are 4 Bureau staff positions and staff members have responsibility in two areas:
   (a) State-wide in selected subject field. (i.e.: Farm Production and Management, Conservation, Agri-Business, Agricultural Mechanization, and Ornamental Horticulture)
   (b) Supervisory on a request basis

5. Time is distributed 1/3 in the field, and 2/3 in the office.

* * *

WHAT'S NEW IN SUPERVISION

Raymon Cunningham, Program Specialist,
West Virginia State Department of Education

1. The "Supervisor" of teachers is now being referred to as a Consultant or Program Specialist who provides specialized services in the various levels and areas of instruction.

2. Much supervisory responsibility is now being delegated to a county vocational supervisor by the state supervisor.

3. The supervising of the occupational-experience educational programs at both the high school and the post-high school level.

4. Supervision of multiple teacher departments with teacher specialization in different areas. For example: Agriculture Mechanics, Agricultural Sales and Services, Conservation, Horticulture Produce Industry, and Ornamental Horticulture.

5. Working cooperatively with "Vocational Guidance" counselors.

6. Supervision in area vocational schools.

7. Supervising split departments which is supervision in counties with two-year introduction agriculture in the Junior high and two years specialized vocational agriculture in the eleventh and twelfth grades in the vocational education center.

8. Supervision of teachers with small group instruction and those with large group instruction who are using closed-circuit television and various other instructional aids.

9. Supervising and evaluating departments which are incorporating the team teaching method.

10. The supervision of students in Special Education under Purpose IV set up on a two-semester basis with or without a supervised experience program.

11. The supervision of agricultural programs that include girls as well as boys.

12. The supervision of teachers who offer instruction in off-farm agriculturally-related occupations.

13. Supervision of Special Adult Agricultural Classes other than Young and/or Adult Farmer Classes in which the vocational agriculture instructor may teach or act only as coordinator.

14. Working with county administration and vocational advisory councils in planning new programs including area vocational schools or multi-county schools.

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WHAT'S NEW IN NEW HAMPSHIRE

Martin L. Mitchell, Supervisor,
New Hampshire State Department of Education

Summary of Remarks

The name of the position has been changed from Consultant to Supervisor, with little change in role.

* * *

Question Period

Since high school drop-outs exist, should a terminal course structure be developed?

Reactions by Members:

(a) Diplomas for 1-4 years could be awarded.
(b) Three levels of programs could be provided:
  (1) Disadvantaged program
  (2) Traditional secondary program
  (3) Program with emphasis on out-of-school training for off-farm occupations. Mobility between the programs should be provided.

(c) It is possible to provide students with both vocational training and preparation for college.
(d) No student should be considered terminal.

Summary: L. L. Turner, Moderator

1. The role of the supervisor is to create an atmosphere for success in teaching. More time should be spent here.

2. Changes are necessary due to:
   (a) Increasing population
   (b) Students stay in school longer
   (c) Decreased farm orientation
   (d) A lower percentage of farm boys enrolled in agriculture programs
   (e) The increasing need for cooperative working relationships

* * *

BUSINESS SESSION, AGRICULTURAL EDUCATION DIVISION OF AVA

Regional Chairman: David Shontz

AATEA REGIONAL VICE-PRESIDENT'S REPORT

Ralph Barwick, Teacher Trainer, University of Delaware

The AATEA North Atlantic Regional Meeting was called to order at 7:30 p.m. on November 8, 1967 by Vice-President Ralph Barwick.

Vice-President Barwick reported on his activities during the year. This included:

1. Serving on the Distinguished Service Award.

2. Reports to membership of AATEA activities.

3. Nominations from AATEA for AVA.
   Committees:

		Expires
William Drake	Professional Relations	June 30, 1969
Warren Kelly	Teacher Education	June 30, 1969
David Shontz	Research	June 30, 1969
Charles Drawbaugh	Personnel Recruitment	June 30, 1969
Joe P. Bail	Public Information	June 30, 1969

Motion to ratify the above appointments was passed.

4. Honorary Life Membership was discussed. Motion to favor this type of membership at Executive Committee meeting stipulating either Honorary or Life membership. Motion passed.

List of eligible members includes:
Prof. W. H. Evans - New Jersey
Dr. B. A. Gaylord - Vermont
Dr. C. W. Hill - New York

5. David McClay requested that the Executive Committee of AATEA agenda for December 3, 1967 include the possible change of name of The Agricultural Education Magazine to Journal of Agricultural Education.

6. A. H. Krebs reported on the new publication sponsored by AATEA -- Teacher Education in Agriculture. He suggested the organization might wish to publish monographs on Agricultural Education for lay consumption. It was voted to have the AATEA Executive Committee explore the issue.

Ralph Barwick moved the report be accepted. Motion carried.

* * *

NASAE REGIONAL VICE-PRESIDENT'S REPORT

W. H. Wayman, Supervisor,
West Virginia State Department of Education

A meeting of the NASAE of the North Atlantic Region was called to order at 7:45 p.m., November 8, 1967, in Room 200 of the Conference Center of the I. & L. R. College of Cornell University by Vice-President W. H. Wayman. The following supervisors and/or consultants of agricultural education were present: Martin Mitchell, New Hampshire; Ray Northup, Rhode Island; Glenn Lewis, Maryland; Philip Haight, Massachusetts; L. L. Turner, Connecticut; Carl Thomas, West Virginia; Guy E. Cain, West Virginia; Raymon Cunningham, West Virginia; Frederic Myer, Delaware; Harold Noakes, New York; W. H. Wayman, West Virginia; Julian Carter, Vermont. Others present were: David E. Larrabee, Sr., Pennsylvania; A. N. Boma, West Cameroon; Frank Wolff, New York; Russ Quinn, Interstate; Julian Morgan, Connecticut.

Business transacted: James Fink was elected to represent the North Atlantic Region on the FFA Board of Directors for a two-year term to succeed W. H. Wayman. Harold Noakes was elected First Alternate and Glenn Lewis, Second Alternate.

It was voted that the chairman contact James Fink to determine if he will serve. If not, Harold Noakes will represent the Region, and Glenn Lewis will be the Alternate.

The chairman stated that the Board of Directors meets three times each year - each meeting including the National Convention last about one week. All expenses are paid by the National Organization.

L. L. Turner was nominated for Vice-President of the North Atlantic Region of the NASAE.

The make-up of the present Board and recommendations for changes were discussed.

The chairman urged the various states to discuss thoroughly the proposed FFA Center before taking any action.

The recent ruling by the Department of Health, Education and Welfare concerning girls in the FFA was discussed. Harold Noakes stated that he hoped the change could be brought about without a floor debate by the delegates at some future national convention.

Appointment was discussed as it effected the delegate body at the National FFA Convention. The chairman stated that two states each had more membership than the entire North Atlantic Region.

Three new proficiency awards will be available in 1968 making a total of 13. High school graduates out of school no more than one year will be eligible to apply for one of the 13 awards.

Meeting adjourned at 8:58 p.m.

W. H. Wayman moved the report be accepted. Motion carried.

* * *

REPORT OF NVATA REGIONAL ALTERNATE VICE-PRESIDENT

Howard Teal, NVATA Regional Alternate Vice-President,
Boonville, New York

I appreciate the opportunity to meet with you today and I am sorry it was impossible for me to be present during the first two days of your conference. I am sure they must have been most productive. Bill Smith sends his regrets for being unable to be here today due to prior committments. Don Robinson, President of the Association of Teachers of Agriculture of New York also asked me to express his regrets that he could not get away.

We in Region VI of the NVATA are proud of the cooperative relationship that exists between us and each of the other two groups in the Agricultural Education Division of AVA. I trust that this spirit of cooperation will continue. For, as we see it, it will take all three groups working harmoniously together to realize for agricultural education the almost unlimited possibilities that lie ahead.

Region VI, NVATA, held its annual leadership conference on August 15 and 16 at Penn State University. We were fortunate to have Past-President Jim Durkee with us at this meeting. Under the leadership of Vice-President Bill Smith, it proved a very interesting and rewarding conference. We were brought up to date on NVATA activities. We had a chance to get acquainted with the Association leaders of the various states, to hear the reports of their organizations and swap ideas for improving our state organizations and vocational agriculture. We also had a chance to make suggestions to be taken to the NVATA Executive Committee and to make plans for the Cleveland Convention.

Before closing, I would like to make one request of both the other groups in the Agricultural Division. It seems that some of the states with smaller numbers of agricultural teachers are unable to attend regional and national meetings. As it would appear that 100% representation in these meetings of the NVATA is extremely desirable for the good of vocational agriculture, any encouragement and support that you can lend toward attendance at these meetings will be very much appreciated.

Again, I am glad to have had the chance to be with you today and look forward to our meetings with you next month in Cleveland.

Howard Teal moved acceptance of the report. Motion carried.

JJJJJJ

Report of Regional Members on Standing Committees

PROFESSIONAL RELATIONS

William E. Drake, Associate Professor,
Agricultural Education, Cornell

Recommended plans for the Committee for 1967:

1. Continue to involve school administrators, vocational education directors, school counselors, other vocational educators, and others in professional relations programs and activities.

2. Encourage joint cooperative activities between leaders in vocational agricultural education and deans of agriculture and directors of agricultural instruction in land-grant universities. Invite selected deans and directors to participate in the 1967 Professional Relations Committee meeting. (Attention should be given the RICOP resolution dated November 15, 1966).

3. Investigate the feasibility of sponsoring a joint meeting of the Professional Relations Committee, the Professional Personnel Recruitment Committee, and the Distributive Education-Vocational Agriculture Committee (the committee reported on by Dick Wilson) at the 1967 AVA Convention. (This joint effort might be scheduled on Monday morning in lieu of separate committee meetings.)

5. Initiate planned systematic laison at all levels between vocational education in agriculture and the United States Department of Agriculture.

5. Stimulate a more active cooperative relationship between vocational education in agriculture and organizations and agencies such as the American Association of School Board Members, the Department of Labor, State employment agencies, legislative committees, and national farm organizations.

6. Dr. I. C. Cross of Colorado was elected Chairman of this committee for 1967.

Pertinent Statements of Concensus to be presented to the Agricultural Education Division Executive Committee:

1. We believe emphasis should be placed upon the total education of the student. We believe there are some unique educational objectives common to all vocational education programs. In some instances an inter-disciplinary team-teaching approach may be the most effective means of achieving such objectives.

2. We must continue to focus upon traditional programs in production agriculture as the basic program and foundation in vocational agriculture. However, adjustments and improvements in traditional programs must be made. Cooperative off-farm training programs and pre-employment laboratory training in agriculture should supplement traditional programs under appropriate conditions. It should be recognized other vocational programs may be better qualified to conduct certain activities now being assumed by vocational agriculture.

3. We must recognize that industry is vitally concerned with the educational objective of training people for entry into jobs. We must realize that industry is concerned with much more than training people for technical competencies. Industry is concerned with developing those desirable attitudes and abilities in human relations such as:
   (a) the ability to communicate effectively through reading, writing, speaking, and listening.
   (b) the appreciation of the dignity of work and proper attitude toward hard work and menial jobs.

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(c) favorable attitudes and work habits such as promptness, loyalty, and acceptance of responsibility.
(d) the ability to think and reason, solve problems, and make wise managerial decisions.

We believe these abilities and attitudes may best be achieved through cooperative participating training programs with vocational education and industry.

4. We believe one of the most severe and just criticisms of teachers of vocational agriculture, supervisors, and teacher educators is their failure to properly utilize resources and educational tools readily available in the community. Industry and vocational education have many mutual interests, and for this reason, cooperative undertakings should be implemented to achieve common objectives.

5. We believe leaders in vocational education in agriculture are prone to default their responsibilities in the areas of professional relations and public relations by failing to participate more actively and aggressively in programs and activities sponsored by industry, governmental agencies, and organizations. We feel leaders in vocational education in agriculture tend to "work within a shell." This, we believe, is true of leaders at the national level, at state levels, and at local levels. We cannot afford to abdicate these important responsibilities.

Bill Drake moved the report be accepted. Motion carried.

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COUNCIL ON TEACHER EDUCATION

William E. Drake, Associate Professor,
Agricultural Education, Cornell

Several suggestions for activities were offered. They were:

1. State Councils of Vocational Teacher Education
   - guidelines be established by a committee of Teacher Education and State Director.
   - models be developed.
   - select seven or eight State Directors who reacted favorably to Worthington's questionnaire to serve on a committee to develop criteria for Council on Teacher Education.

2. Ask the director of the National Advisory Council what is being done to assess the influence of teacher education.
   - in what way can CTE cooperate?
   - promote a cost study analysis of the preparation of teachers (Vocational Education) - identify pre-service, in-service, materials, etc.

3. Develop a proposal for an Institute for Leadership through State Councils, Vocational Teacher Education (4c funds).

Detailed suggestions were developed to be sent to several state directors concerning the establishment of a State Council on Vocational Teacher Education. Dr. William Logan will contact the State Directors.

Suggested guidelines for developing State Councils on Vocational Education:

A. Objectives:

1. To improve teacher education in vocational education fields.
2. To integrate efforts of teacher education groups within the American Vocational Association and coordinate efforts of teacher education groups within the other professional groups.
3. To provide representative communication from State Councils on Teacher Education to AVA Council on Teacher Education.
4. To share in policy matters affecting teacher education.
5. To provide for sharing of ideas and resources concerning teacher education.
6. Provide leadership for formulation of criteria for evaluation of teacher education.
7. Develop models for teacher education in the state.
8. Clarify relationships with business, industry, etc., regarding participation in Vocational Teacher Education.
9. Provide lines of communication between Vocational Teacher Education and all aspects of Vocational Technical Education.
10. Liaison with R. C. U.'s in design of studies, analysis, research, experimentation (input and outcomes, cost benefits, teacher need surveys, etc.). (Are the states getting their money's worth in Teacher Education?)

B. Teacher Education Membership -- State Councils

1. Representatives
   (a) Total Vocational Technical Services
      - Agriculture
      - Teacher Education
      - Business
      - Industrial Arts

  - Distributive Education
  - Health Occupations
- (b) Institutions of higher education (public and private)
- (c) State Vocational Agencies
  - State Director - ex officio
  - R. C. U.
  - Teacher Education Director
  - Others appropriate in preparation of teacher education not utilization of teacher education
- (d) Others appropriate in individual states

C. Organizational Procedures

1. Initiation by leadership of State Director of Vocational Education.

2. Appointment of interim or working committee to:
   - develop purposes
   - membership
   - procedures
   - relationships *

The group made recommendations for changes in constitution and by-laws.* These changes were needed as a result of the Vocational Education Act of 1963 and recent concerns of Teacher Education. These changes will be voted on at the December business meeting. Any questions or suggestions about these changes should be sent to William Logan.

It was recommended that William Logan request from Board of Directors of AVA financial support for CTE. This would be used for CTE business, mailings, and honorarium to speaker at AVA. It was recommended that $100 per service group be given to CTE.

The nominating committee, consisting of William Logan, Robert Worthington, and Clarence Bundy, met and prepared a slate to be presented at the December business meeting. A chairman, vice-chairman, and a treasurer will be elected. A recommendation for AOTE representative will also be named.

Plans were tentatively made for AVA Teacher Education meeting in Cleveland, December 5, 1967. Suggested topics include: Retooling Teacher Education and Developments in NCATE.

Bill Drake moved the report be accepted. Motion carried.

* * *

PROFESSIONAL INFORMATION

David Shontz substituting for Frank Wolff, Associate,
Division of Occupational Educational Supervision,
New York State Department of Education

1. There has been a suggestion that the traditional function of this committee, that of gathering descriptions of certain instructional materials and publishing them in a directory, be eliminated. To my knowledge, however, the usual publication describing these materials will be published at least once more (for the 1967-68 year).

2. The suggestion for dropping this function of the Professional Information Committee assumes that the ERIC System will soon be providing the services which have usually been assigned to the Committee.

3. The gathering of descriptions process is now underway in the Region. So far, 4 states have reported the new materials produced in their states or the lack of them as the case may be.

We hope the remaining 8 states will also report by November 20th so that we will be able to make at least a preliminary compilation prior to the meeting of the committee at Cleveland. Reports are expected from both the Head Teacher Educator in each state and the State Supervisor since frequently each oversees the production of materials. Reports should be sent to Frank Wolff, Division of Occupational Education Supervision, State Education Department, Albany, New York 12224.

Research Committee - D. F. Shontz

Abstracts of studies completed in North Atlantic Region, 1966-67 - distributed earlier.

Studies in Progress, 1966-67 - distributed earlier.

Dr. Stevens is a member of A. V. A. Research Committee. He already reported on future of Summaries of Studies in Agricultural Education.

Encourage attendance at AVA Research meeting on Monday, December 7, Convention.

Any suggestions to present to AVA Research Committee will be welcome.

AVERA - Charter membership.

Dave Shontz moved the report be accepted. Motion carried.

JJJJJJ

STANDARDS AND POLICIES

L. L. Turner, Agricultural Education Consultant,
Connecticut State Department of Education

A copy of the report was distributed at the conference.

L. L. Turner moved the report be accepted. Motinn carried.

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TEACHER EDUCATION

Warren Kelly, Teacher Trainer, West Virginia University

1. Newly appointed committee, so there was no chance to communicate.

2. When it was discovered that I would be called on to report during this Conference, I decided to write each Head Teacher Educator and ask him to prepare a brief summary of what his institution was doing in teacher preparation and in-service training programs. The response has been excellent, but Dave McClay reminded me that similar information was going to be given during the Teacher Education Symposium presentation this morning. I believe you will bear with me for a brief summary of what I see as trends in teacher preparation programs.

But, first, let me say that our AATEA President, Al Krebs, wrote an article for the August issue of The Agricultural Education Magazine which portrays some of the major problems and issues in agricultural education. In this article he lists what I believe to be the major problems facing us today. A quick review shows them to be:

New - How are the teacher education programs addressing themselves toward solving these problems and/or adapting to the demands for teachers who can handle the new programs which have come into being since the passage of the Vocational Education Act of 1963.

What is the picture?

Cornell has a teacher preparation program which provides for special fields in: (1) Agricultural Business, (2) Agricultural Mechanization, (3) Conservation, (4) Farm Production and Management, (5) Ornamental Horticulture; 36 hours technical agriculture and 18 hours professional.

Rutgers - Teaching option in Ornamental Horticulture; teaching option in agricultural business; teaching option in environmental science.

Students must take three core courses in a vocational education mix involving Home Economics, T. & I., Distributive Education, Technical Education and Office Occupations.

At the Master's level, an innovation is being put in force whereby a graduate student is placed with one or more cooperating agricultural or related businesses; 26 professional education credits.

New Hampshire - Students are expected to develop a dual major in one of the various departments in the College of Agriculture: (1) Off-Farm Agricultural Occupations; (2) Resource Economics - 24 hours Professional Education, 30 hours of Technical Agriculture; Master's - two-year post-secondary division of the College of Agriculture.

Here they can develop a specialty in: (1) Animal Science, (2) Plant Science, (3) Forestry, (4) Commerce - includes management, distribution and marketing agricultural products.

Rhode Island - First teacher educator in agricultural education started on job in 1964.

In reality, Rhode Island also has specialty students because their students are drawn from the (1) Agricultural Technology, (2) Agricultural Science and (3) Agricultural Business; 27 credits in Professional Education, 40 credits in Technical Agriculture.

Delaware - Most recently changed requirements for teacher certification by reducing general education, professional education and technical agriculture to allow unrestricted semester hours from 15 to 46. The new emphasis makes it possible to train both a generalist and specialist by wise use of the 30 hours of required technical agriculture and 46 hours of unrestricted electives.

Most common specialities: (1) Agricultural Business Management, (2) Agricultural Mechanics, (3) Ornamental Horticulture.

New certification requirements have been adopted for persons who have previously earned B. S. degrees. He must earn a minimum of 12 semester hour credits in Professional Education and his B. S. Degree must include 12 semester hour credits of technical agriculture in the specialty area for which the candidate is being employed.

Penn State - Pre-service: (1) Encourage other majors to minor in agricultural education, (2) encourage those with a B. S. Agr. to enroll and complete teacher certification.

Now have 3 subject matter specialists on the staff: (1) Agricultural Mechanics, and Engineering, (2) Business and Management, and (3) Soil and Plant Science.

Hope to add a 4th one in Food Technology.

Have a vigorous off-campus instructional program.

Vermont - More general.

Additional problems:

What about our profession?

Special teacher certification.

(Paradox here - we need the teachers; some fail because they lack method, technique and understanding of child behavior and even adult behavior, so we hire them. At the same time, we have teachers who prepared themselves professionally and we may stand a chance of losing out in the end by what we do as expediency.)

Warren Kelly moved the report be accepted. Motion carried.

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MEMBERSHIP

David McClay, Head, Agricultural Education Division,
Pennsylvania State University

AVA Membership - July 1, 1967

Nationwide

	July 1, 1966	July 1, 1967	% of Potential
Agriculture	9,971	9,704	88.5
Business & Office Education	2,145	2,769	27.9
D. E.	1,932	2,205	76.5
Guidance	377	635	42.9
Health Occupations	--	207	90.4
Home Economics	8,542	8,552	47.6
Industrial Arts	1,331	1,318	7.3
T & I	10,943	11,965	45.4
Others	--	--	--
	36,748	39,856	45.0

Agriculture - North Atlantic Region

	Members	Potential
Connecticut	32	38
Delaware	21	24
Maine	18	20
Maryland	45	70
New Hampshire	15	24
New Jersey	26	48
New York	251	270
Pennsylvania	184	288
Rhode Island	11	12
Vermont	19	23
West Virginia	117	112

David McClay moved the report be accepted. Motion carried.

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AGRICULTURAL EDUCATION MAGAZINE

David McClay, Head, Agricultural Education,
Pennsylvania State University

Summary of Report

1. Change in publishers from Interstate to Lowhead Press, Athens, Ohio, due to press deadlines and material quality.

2. The proposed name change to the Journal of Agricultural Education will be discussed at AVA.

David McClay moved that the report be accepted. Motion carried.

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PROFESSIONAL PERSONNEL RECRUITMENT

Charles C. Drawbaugh, Associate Professor,
Rutgers, The State University

A copy of the report was distributed at the conference.

Charles Drawbaugh moved the report be accepted. Motion carried.

* * *

RESEARCH

David Shontz, Assistant Professor,
University of Rhode Island

Professor Shontz referred to the abstracts of studies in agricultural education which were distributed at his presentation in the third general session of this conference.

David Shontz moved the report be accepted. Motion carried.

* * *

PUBLICATIONS

Joe P. Bail, Chairman, Agricultural Education Division, Cornell

Professor Bail called attention to and discussed a number of publications displayed at the conference. These included the AVA series in agricultural education.

Joe Bail moved the report be accepted. Motion carried.

* * *

Election of Vacancies to Standing Committees

Prof. R. Ennis nominated Philip Haight of Massachusetts as regional representative on the AVA-Agricultural Education Division Membership Committee. Nominations were closed and election was unanimous.

Dates and Location for Conference in 1968 and 1969

1. November 6-8 were the dates decided upon for 1968.

2. Al H. Krebs invited the conference to Maryland in 1968. Moved by Charles Drawbaugh to accept the invitation. Motion seconded and carried.

3. Philip Edgecomb invited the conference to Massachusetts for 1969. Moved by A. H. Krebs to accept the invitation. Motion seconded and carried.

4. Invitations for the conference location for 1970 were made by:
   - (a) Robert Ennis for New Hampshire
   - (b) Dave McClay for Pennsylvania
   - (c) Charles Rhodes for West Virginia

It was moved to keep these invitations on record. Motion seconded and carried.

The conference ended at 11:45 a.m.

Arthur Berkey
Conference Secretary